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EXAMINER				
HENRY, RODNEY M				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patent-ch@btlaw.com

# Office Action Summary

## Application No.

10/800,883

## Applicant(s)

JENSEN ET AL.

## Examiner

RODNEY HENRY

## Art Unit

3682

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) 21,44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20,22-43 and 45-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The following is a non-final office action on the merits. The Examiner acknowledges communication from the Applicant dated 5/4/2011. Therefore, claims 1-20, 22-43, and 45-67, are currently pending and have been considered below.

#### **Claim Rejections - 35 USC § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-3, 9-14, 17-20, 29-37, 40, 41, 45, 47, 48, 56-62, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger et al. (Geiger) (US 2001/0028301), in view Swartz et al. (Swartz) (US 20030132298), and further in view of Shotey et al. (Shotey) (US 20020004740).**

#### **As per Claim 1:**

Geiger et al. discloses a method for monitoring exposure to a product of a participant in market research comprising:

detecting product data in the portable monitor, the product data being contained in a product signal received in the wireless receiver from a predetermined signal transmitter proximal to a respective product, the product data representing the respective product

(Geiger paragraph 48 discusses signal transmission based on proximity, and a portable (capable of being moved about) cart via "the transceiver unit 65 may include a proximity sensor 69 that detects the presence of a shopping cart within range and initiates transmission of the trigger and data signals to the display unit 12 on the cart handle 10, and [0058] A cue signal, such as a chime, light or handle vibration, may be generated at the beginning of the message to alert the shopper that a promotional message is being displayed. The cue signal may also be generated when the promotional message is activated by the transceiver units 65 located proximate the promoted product".)

Geiger does not explicitly disclose

the product signal having a signal strength selected so that the product data is detectable by the portable monitor only when in a predetermined proximity to the predetermined signal transmitter

the product signal having a signal strength selected so that the product data is detectable by the portable monitor only when in a predetermined proximity to the predetermined signal transmitter

providing a portable monitor comprising a wireless receiver to a respective participant selected from a plurality of participants in the market research study

storing first time data on a predetermined time base in association with the product data representing timing of proximity to the product

the portable monitor being adapted to be carried on the person of a participant; and storing the product data in the portable monitor.

However Swartz discloses

detecting product data in the portable monitor, the product data being contained in a product signal received in the wireless receiver from a predetermined signal transmitter proximal to a respective product, the product data representing the respective product

(Swartz FIG. 12 shows wearable device paragraph 68 discusses product exposure via "During the customer's shopping visit, the downloaded messages could be displayed on the portable terminal".)

the product signal having a signal strength selected so that the product data is detectable by the portable monitor only when in a predetermined proximity to the predetermined signal transmitter

(Swartz paragraph 119 discusses product data based on proximity via "FIG. 7A illustrates a greeting message that is displayed on a portable terminal upon retrieval of the portable terminal or upon activating a portable terminal in the vicinity of a merchant". Also paragraph 211 states "The system may provide a reminder to the customer to purchase an item on the list if the customer is in the vicinity of the item or if the customer passes the item without scanning the item".)

providing a portable monitor comprising a wireless receiver to a respective participant selected from a plurality of participants in the market research study;

Swartz paragraph 189 discusses inference modeling and data gathering based on a group of customers where the promotion gets tweaked based on the results of the market study.

storing first time data on a predetermined time base in association with the product data representing timing of proximity to the product

the portable monitor being adapted to be carried on the person of a participant; and storing the product data in the portable monitor (Swartz FIG. 12 shows wearable device).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add detecting product data in the portable monitor, the product data being contained in a product signal received in the wireless receiver from a predetermined signal transmitter proximal to a respective product, the product data representing the respective product the product signal having a signal strength selected so that the product data is detectable by the portable monitor only when in a predetermined proximity to the predetermined signal transmitter

the product signal having a signal strength selected so that the product data is detectable by the portable monitor only when in a predetermined proximity to the predetermined signal transmitter

providing a portable monitor comprising a wireless receiver to a respective participant selected from a plurality of participants in the market research study; the portable monitor being adapted to be carried on the person of a participant; and storing the product data in the portable monitor to the system of Geiger et al.. One would have been motivated to do this in order to keep customers informed of promotions even when they step away from their shopping cart and to further monitor the

customer's behavior while in the store (to ensure fraudulent behavior does not take place).

Shotey further discloses

storing first time data on a predetermined time base in association with the product data representing timing of proximity to the product

Shotey paragraph 28 states "The device also preferably includes a clock for recording and storing at time at which the target location identifier code is inputted into the portable storage device".

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add storing first time data on a predetermined time base in association with the product data representing timing of proximity to the product to the system of Geiger et al.. One would have been motivated to do this in order to include time data as a key aspect and variable in the market study.

**As per Claim 2:**

Geiger et al. discloses detecting commercial establishment data in a commercial establishment signal transmitted wirelessly within a commercial establishment in which the product is located, the commercial establishment data representing the commercial establishment (see paragraph [0048]).

**As per Claim 3:**

Geiger et al. discloses wirelessly receiving the commercial establishment signal (see paragraph [0048]).

**As per Claim 8:**

Geiger et al. discloses receiving the commercial establishment signal as an RF signal (see paragraph [0048]).

**As per Claim 9:**

Geiger et al. discloses receiving the product signal as an RF signal (see paragraph [0048]).

**As per Claim 10:**

Geiger et al. discloses receiving both the product signal and the commercial establishment signal in the wireless receiver (see paragraph [0048]).

**As per Claim 11:**

Geiger et al. discloses receiving the commercial establishment signal as a light signal (see paragraph [0052]).

**As per Claim 12:**

Geiger et al. discloses receiving the commercial establishment signal as an infrared signal (see paragraph [0008]).

**As per Claim 13:**

Geiger et al. discloses receiving the commercial establishment signal as a visible light signal (see paragraph [0052]).



**As per Claim 14:**

Geiger et al. discloses receiving the product signal as a light signal (see paragraphs [0048, 0058]).

**As per Claim 17:**

Geiger et al. discloses receiving the product signal as an RF signal (see paragraph [0048]).

**As per Claim 18:**

Geiger et al. discloses receiving the product signal as a light signal (see paragraphs [0048, 0058]).

**As per Claim 19:**

Geiger et al. discloses receiving the product signal as an infrared signal (see paragraph [0008]).

**As per Claim 20:**

Geiger et al. discloses receiving the product signal as a visible light signal (see paragraph [0008]).

**As per Claim 29:**

Geiger et al. discloses a sensitivity of the wireless receiver is selected so that the portable monitor is capable of detecting the product data in the product signal only when the wireless receiver is in the predetermined proximity to the predetermined signal transmitter (see paragraph [0048]).

**As per Claim 30:**

Geiger et al. discloses the sensitivity of the wireless receiver is selected so that the portable monitor is capable of detecting the product data in the product signal only when the wireless receiver is located within a predetermined exposure area in which the respective participant is able to perceive the product (see paragraph [0048]).

**As per Claim 31:**

Geiger et al. discloses a device for monitoring exposure to products by participants in market research, comprising:

the portable monitor comprising a wireless receiver operative to receive a product signal from a predetermined signal transmitter proximal to a respective product, the product signal containing product data representing the respective product;

the wireless receiver having a sensitivity selected so that the portable monitor is capable of detecting the product data in the product signal only when in a predetermined proximity to the predetermined signal transmitter;

(Geiger paragraph 48 discusses signal transmission based on proximity, and a portable (capable of being moved about) cart via "the transceiver unit 65 may include a proximity sensor 69 that detects the presence of a shopping cart within range and initiates transmission of the trigger and data signals to the display unit 12 on the cart handle 10, and [0058] A cue signal, such as a chime, light or handle vibration, may be generated at the beginning of the message to alert the shopper that a promotional message is being displayed. The cue signal may also be generated when the

promotional message is activated by the transceiver units 65 located proximate the promoted product").).

Geiger et al. does not explicitly disclose the portable monitor being adapted to be carried on the person of a participant; and a data storage coupled with the wireless receiver to receive and store the product data;

storing first time data on a predetermined time base in association with the product data representing timing of proximity to the product

a clock operative to produce first time data on a predetermined time base and coupled with the data storage to supply the time data thereto, the data storage being operative to store the first time data in association with the product data representing a timing of proximity to the respective product

However Swartz discloses

the portable monitor being adapted to be carried on the person of a participant;  
a data storage coupled with the wireless receiver to receive and store the product data

(Swartz FIG. 12 shows wearable device paragraph 68 discusses product exposure via "During the customer's shopping visit, the downloaded messages could be displayed on the portable terminal".)

(Swartz paragraph 119 discusses product data based on proximity via "FIG. 7A illustrates a greeting message that is displayed on a portable terminal upon retrieval of the portable terminal or upon activating a portable terminal in the vicinity of a merchant".

Also paragraph 211 states "The system may provide a reminder to the customer to purchase an item on the list if the customer is in the vicinity of the item or if the customer passes the item without scanning the item".)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the portable monitor being adapted to be carried on the person of a participant; a data storage coupled with the wireless receiver to receive and store the product data to the system of Geiger et al.. One would have been motivated to do this in order to keep customers informed of promotions even when they step away from their shopping cart and to further monitor the customer's behavior while in the store (to ensure fraudulent behavior does not take place).

Shotey further discloses storing first time data on a predetermined time base in association with the product data representing timing of proximity to the product

a clock operative to produce first time data on a predetermined time base and coupled with the data storage to supply the time data thereto, the data storage being operative to store the first time data in association with the product data representing a timing of proximity to the respective product

Shotey paragraph 28 states "The device also preferably includes a clock for recording and storing at time at which the target location identifier code is inputted into the portable storage device". And Swartz and Geiger above discuss proximity.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add a clock operative to produce first time data on a predetermined time base and coupled with the data storage to supply the time data thereto, the data storage being operative to store the first time data in association with the product data representing a timing of proximity to the respective product to the system of Geiger et al.. One would have been motivated to do this in order to include time data as a key aspect and variable in the market study.

**As per Claim 32:**

Geiger et al. discloses comprising a further wireless receiver operative to detect commercial establishment data in a commercial establishment signal transmitted wirelessly within a commercial establishment in which the product is located, the commercial establishment data representing the commercial establishment (see paragraph [0048]).

**As per Claim 33:**

Geiger et al. discloses the data storage is coupled with the further wireless receiver to receive and store the commercial establishment data (see paragraph [0047]).

**As per Claim 34:**

Geiger et al. discloses the wireless receiver is operative to detect commercial establishment data in a commercial establishment signal transmitted wirelessly within a commercial establishment in which the product is located, the commercial establishment data representing the commercial establishment (see paragraph [0048]).

**As per Claim 35:**

Geiger et al. discloses the data storage is operative to receive and store the commercial establishment data (see paragraph [0047]).

**As per Claim 36:**

Geiger et al. discloses the wireless receiver comprises an RF receiver (see paragraph [0048]).

**As per Claim 37:**

Geiger et al. discloses a processor coupled with the RF receiver to receive the product data therefrom and operative to store the product data in the data storage (see paragraph [0048]).

**As per Claim 40:**

Geiger et al. discloses the wireless receiver comprises a light sensor operative to produce a transduced product signal from a product signal in the form of light energy (see paragraph [0048]).

**As per Claim 41:**

Geiger et al. discloses a processor coupled with the light sensor to receive the transduced product signal and operative to detect the product data therein (see paragraph [0048]).

**As per Claim 45:**

Geiger et al. discloses a media data exposure monitoring device operative to gather media data exposure data in the portable monitor representing exposure of the respective participant to media data, the media data exposure monitoring device being coupled with the data storage to supply the media data exposure data thereto, the data storage being operative to store the media data exposure data in association with second time data on the predetermined time base received from the clock and representing a timing of exposure to the media data (see paragraphs [0047, 0053]).

**As per Claim 47:**

Geiger et al. discloses the sensitivity of the wireless receiver is selected so that the portable monitor is capable of detecting the product data in the product signal only when the wireless receiver is located within a predetermined exposure area in which the respective participant is able to perceive the product (see paragraphs [0048]).

**As per Claim 48:**

Geiger discloses a method for monitoring exposure to a predetermined product of a participant in market research, comprising:

storing product location data representing a location of a predetermined product

Geiger paragraph 16 states "allow a user to scroll through the promotional products to locate items of particular interest".

Geiger et al. does not explicitly disclose:

storing participant location data representing a plurality of locations of the participant monitored by means of the portable monitor; and

processing the participant location data and the product location data to produce product proximity data indicating exposure of the participant to the predetermined product.

However Swartz discloses

monitoring a location of a participant in market research by means of a portable monitor carried on the person of the participant;

storing participant location data representing a plurality of locations of the participant monitored by means of the portable monitor; and

processing the participant location data and the product location data to produce product proximity data indicating exposure of the participant to the predetermined product

(Swartz paragraph 119 discusses product data based on proximity via "FIG. 7A illustrates a greeting message that is displayed on a portable terminal upon retrieval of the portable terminal or upon activating a portable terminal in the vicinity of a merchant". Also paragraph 211 states "The system may provide a reminder to the customer to purchase an item on the list if the customer is in the vicinity of the item or if the



customer passes the item without scanning the item". Swartz FIG. 12 shows wearable device.)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add monitoring a location of a participant in market research by means of a portable monitor carried on the person of the participant; storing participant location data representing a plurality of locations of the participant monitored by means of the portable monitor; and processing the participant location data and the product location data to produce product proximity data indicating exposure of the participant to the predetermined product to the system of Geiger et al.. One would have been motivated to do this in order to keep customers informed of promotions even when they step away from their shopping cart and to further monitor the customer's behavior while in the store (to ensure fraudulent behavior does not take place).

**As per Claim 56:**

Geiger et al. discloses processing the participant location data and product location data comprises comparing the participant location data with the product location data to produce the product proximity data (see paragraphs [0054]).

**As per Claim 57:**

Geiger et al. discloses processing the participant location data and the product location data comprises producing the product proximity data to represent a presence of

the participant within a predetermined exposure area in which the participant is able to perceive the product (see paragraphs [0054]).

**As per Claim 58:**

Geiger et al. discloses determining a presence of the participant in a commercial establishment in which the predetermined product is offered for sale (see paragraphs [0054]).

**As per Claim 59:**

Geiger et al. discloses a system for monitoring exposure of a participant in market research to a predetermined product, comprising: a database storing product location data representing a location of a predetermined product; a portable monitor adapted to be carried on the person of a participant in market research and comprising a position monitor operative to produce participant location data representing a location of the participant and a data storage coupled with the position monitor to receive the participant location data and operative to store the participant location data; and a processor coupled with the portable monitor to receive the participant location data therefrom and operative to access the product location data from the database; the processor serving to process the participant location data and the product location data produce product proximity data indicating exposure of the participant to the predetermined product. See similar rejections of claims 1, 31, and 48.

**As per Claim 60:**

Geiger et al. discloses the processor is operative to compare the participant location data with the product location data to produce the product proximity data (see paragraphs [0054]).

**As per Claim 61:**

Geiger et al. discloses the processor is operative to produce the product proximity data to represent a presence of the participant within a predetermined exposure area in which the participant is able to perceive the product (see paragraphs [0054]).

**As per Claim 62:**

Geiger et al. discloses the processor is coupled with the portable monitor through a communications network (see paragraphs [0048]).

**As per Claim 65:**

Geiger et al. discloses the data storage is coupled with the media data monitor to receive the media data exposure data and is operative to store the media data exposure data in association with second time data on the predetermined time base representing time of exposure to the media data (see paragraphs [0047, 0053]).

**3. Claims 4, 6, 25, 38, 39, 43, 53, 55, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger et al. (Geiger) (US 2001/0028301), in view Swartz et al. (Swartz) (US 20030132298), in view of Shotey et al. (Shotey) (US 20020004740), and further in view of Crystal et al. (US 2001/0028301).**

**As per Claim 4:**

Geiger et al. does not explicitly disclose receiving the commercial establishment signal as an acoustic signal.

However, Crystal et al. discloses  
receiving the commercial establishment signal as an acoustic signal (see paragraph [0048]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add receiving the commercial establishment signal as an acoustic signal to the system of Geiger et al.. One would have been motivated to do this in order to use cost effective sound wave technology.

**As per Claim 6:**

Geiger et al. does not explicitly disclose receiving the product signal as an acoustic signal.

However, Crystal et al. discloses  
receiving the product signal as an acoustic signal (see paragraph [0048]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add receiving the product signal as an acoustic

signal to the system of Geiger et al.. One would have been motivated to do this in order to use cost effective sound wave technology.

**As per Claim 25:**

Geiger et al. does not explicitly disclose gathering outdoor advertising data in the portable monitor representing exposure of the respective participant to outdoor advertising and storing the outdoor advertising data in association with second time data on the predetermined time base representing timing of exposure to the outdoor advertising.

However, Crystal et al. discloses

**gathering outdoor advertising data** in the portable monitor representing exposure of the respective participant to outdoor advertising and storing the outdoor advertising data in association with second time data on the predetermined time base representing **timing of exposure to the outdoor advertising** (see paragraph [0035]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add gathering outdoor advertising data in the portable monitor representing exposure of the respective participant to outdoor advertising and storing the outdoor advertising data in association with second time data on the predetermined time base representing timing of exposure to the outdoor advertising to the system of Geiger et al.. One would have been motivated to do this in order to gather customer response to outdoor data such as billboards.

**As per Claim 38:**

Geiger et al. does not explicitly disclose the wireless receiver comprises an acoustic transducer operative to produce a transduced product signal from an acoustic product signal.

However, Crystal et al. discloses

the wireless receiver comprises an acoustic transducer operative to produce a transduced product signal from an acoustic product signal (see paragraph [0015]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the wireless receiver comprises an acoustic transducer operative to produce a transduced product signal from an acoustic product signal to the system of Geiger et al.. One would have been motivated to do this in order to use cost effective sound wave technology.

**As per Claim 39:**

Geiger et al. does not explicitly disclose a processor coupled with the acoustic transducer to receive the transduced product signal and operative to detect the product data therein.

However, Crystal et al. discloses

a processor coupled with the acoustic transducer to receive the transduced product signal and operative to detect the product data therein (see paragraph [0021]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add a processor coupled with the acoustic

transducer to receive the transduced product signal and operative to detect the product data therein to the system of Geiger et al.. One would have been motivated to do this in order to use cost effective sound wave technology.

**As per Claim 43:**

Geiger et al. does not explicitly disclose an outdoor advertising exposure monitoring device operative to gather outdoor advertising data in the portable monitor representing exposure of the respective participant to outdoor advertising, the outdoor advertising exposure monitoring device being coupled with the data storage to supply the outdoor advertising data thereto, the data storage being operative to store the outdoor advertising data.

However, Crystal et al. discloses

an outdoor advertising exposure monitoring device operative to gather outdoor advertising data in the portable monitor representing exposure of the respective participant to outdoor advertising, the outdoor advertising exposure monitoring device being coupled with the data storage to supply the outdoor advertising data thereto, the data storage being operative to store the outdoor advertising data (see paragraph [0035]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add an outdoor advertising exposure monitoring device operative to gather outdoor advertising data in the portable monitor representing exposure of the respective participant to outdoor advertising, the outdoor advertising exposure monitoring device being coupled with the data storage to supply the outdoor

advertising data thereto, the data storage being operative to store the outdoor advertising data to the system of Geiger et al.. One would have been motivated to do this in order to gather customer response to outdoor data such as billboards.

**As per Claim 53:**

Geiger et al. does not explicitly disclose gathering outdoor advertising data in the portable monitor representing exposure of the participant to outdoor advertising and storing the outdoor advertising data in association with second time data on the predetermined time base representing timing of exposure to the outdoor advertising.

However, Crystal et al. discloses

gathering outdoor advertising data in the portable monitor representing exposure of the participant to outdoor advertising and storing the outdoor advertising data in association with second time data on the predetermined time base representing timing of exposure to the outdoor advertising (see paragraph [0035]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add gathering outdoor advertising data in the portable monitor representing exposure of the participant to outdoor advertising and storing the outdoor advertising data in association with second time data on the predetermined time base representing timing of exposure to the outdoor advertising to the system of Geiger et al.. One would have been motivated to do this in order to gather customer response to outdoor data such as billboards.



**As per Claim 55:**

Geiger et al. does not explicitly disclose gathering data in the portable monitor representing exposure of the participant to outdoor advertising.

However, Crystal et al. discloses  
gathering data in the portable monitor representing exposure of the participant to outdoor advertising (see paragraph [0035]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add gathering data in the portable monitor representing exposure of the participant to outdoor advertising to the system of Geiger et al.. One would have been motivated to do this in order to gather customer response to outdoor data such as billboards.

**As per Claim 67:**

Geiger et al. does not explicitly disclose the data storage is coupled with the outdoor advertising exposure monitor to receive the outdoor advertising data and is operative to store the outdoor advertising data in association with second time data on the predetermined time base representing time of exposure to the outdoor advertising.

However, Crystal et al. discloses  
the data storage is coupled with the outdoor advertising exposure monitor to receive the outdoor advertising data and is operative to store the outdoor advertising data in association with second time data on the predetermined time base representing time of exposure to the outdoor advertising (see paragraph [0035]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the data storage is coupled with the outdoor advertising exposure monitor to receive the outdoor advertising data and is operative to store the outdoor advertising data in association with second time data on the predetermined time base representing time of exposure to the outdoor advertising to the system of Geiger et al.. One would have been motivated to do this in order to gather customer response to outdoor data such as billboards.

**4. Claims 5, 7, 15, 16, 28, 42, 49, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger et al. (Geiger) (US 2001/0028301), in view Swartz et al. (Swartz) (US 20030132298), in view of Shotey et al. (Shotey) (US 20020004740), and further in view of Schuster et al. (US 2004/0027271).**

**As per Claim 5:**

Geiger et al. does not explicitly disclose detecting data in the received commercial establishment signal in the form of an ancillary code inaudibly encoded in an audio signal.

However, Schuster et al. discloses

detecting data in the received commercial establishment signal in the form of an ancillary code inaudibly encoded in an audio signal (see paragraph [0007]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add detecting data in the received commercial establishment signal in the form of an ancillary code inaudibly encoded in an audio signal to the system of Geiger et al.. One would have been motivated to do this in order to use cost effective sound wave technology.

**As per Claim 7:**

Geiger et al. does not explicitly disclose detecting data both in the product signal and in the commercial establishment signal in the portable monitor as ancillary codes inaudibly encoded in respective audio signals.

However, Schuster et al. discloses

detecting data both in the product signal and in the commercial establishment signal in the portable monitor as ancillary codes inaudibly encoded in respective audio signals (see paragraph [0007]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add detecting data both in the product signal and in the commercial establishment signal in the portable monitor as ancillary codes inaudibly encoded in respective audio signals to the system of Geiger et al.. One would have been motivated to do this in order to use cost effective sound wave technology.

**As per Claim 15:**

Geiger et al. does not explicitly disclose receiving the product signal as an acoustic signal.

However, Schuster et al. discloses

receiving the product signal as an acoustic signal (see paragraph [0007]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add receiving the product signal as an acoustic signal to the system of Geiger et al.. One would have been motivated to do this in order to use cost effective sound wave technology.

**As per Claim 16:**

Geiger et al. does not explicitly disclose detecting the product data in the received product signal in the form of an ancillary code inaudibly encoded in an audio signal.

However, Schuster et al. discloses

detecting the product data in the received product signal in the form of an ancillary code inaudibly encoded in an audio signal (see paragraph [0007]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add detecting the product data in the received product signal in the form of an ancillary code inaudibly encoded in an audio signal to the system of Geiger et al.. One would have been motivated to do this in order to use cost effective sound wave technology.

**As per Claim 28:**

Geiger et al. does not explicitly disclose the signal strength of the product signal is selected so that the product data is detectable by the portable monitor only when the wireless receiver is located within a predetermined exposure area in which the respective participant is able to perceive the product.

However, Schuster et al. discloses

the signal strength of the product signal is selected so that the product data is detectable by the portable monitor only when the wireless receiver is located within a predetermined exposure area in which the respective participant is able to perceive the product (see paragraph [0006]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the signal strength of the product signal is selected so that the product data is detectable by the portable monitor only when the wireless receiver is located within a predetermined exposure area in which the respective participant is able to perceive the product to the system of Geiger et al.. One would have been motivated to do this in order to collect and correlate customer shopping data to timing.

**As per Claim 42:**

Geiger et al. does not explicitly disclose a media data exposure monitoring device operative to gather media data exposure data in the portable monitor representing exposure of the respective participant to media data, the media data exposure monitoring device being coupled with the data storage to supply the media

data exposure data thereto, the data storage being operative to store the media data exposure data.

However, Schuster et al. discloses

a media data exposure monitoring device operative to gather media data exposure data in the portable monitor representing exposure of the respective participant to media data, the media data exposure monitoring device being coupled with the data storage to supply the media data exposure data thereto, the data storage being operative to store the media data exposure data (see paragraph [0007]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add a media data exposure monitoring device operative to gather media data exposure data in the portable monitor representing exposure of the respective participant to media data, the media data exposure monitoring device being coupled with the data storage to supply the media data exposure data thereto, the data storage being operative to store the media data exposure data to the system of Geiger et al.. One would have been motivated to do this in order to collect and analyze customer shopping data.

**As per Claim 49:**

Geiger et al. does not explicitly disclose storing first time data on a predetermined time base in association with the participant location data representing timing of the participant's presence at the plurality of locations.

However, Schuster et al. discloses

storing first time data on a predetermined time base in association with the participant location data representing timing of the participant's presence at the plurality of locations (see paragraph [0006]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add storing first time data on a predetermined time base in association with the participant location data representing timing of the participant's presence at the plurality of locations to the system of Geiger et al.. One would have been motivated to do this in order to collect and analyze customer location data.

**As per Claim 64:**

Geiger et al. does not explicitly disclose the portable monitor further comprises a media data monitor operative to gather media data exposure data representing exposure of the participant to media data.

However, Schuster et al. discloses

the portable monitor further comprises a media data monitor operative to gather media data exposure data representing exposure of the participant to media data (see paragraph [0007]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the portable monitor further comprises a media data monitor operative to gather media data exposure data representing

exposure of the participant to media data to the system of Geiger et al.. One would have been motivated to do this in order to collect and analyze customer shopping data.

**5. Claims 22, 23, 50, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger et al. (Geiger) (US 2001/0028301), in view Swartz et al. (Swartz) (US 20030132298), in view of Shotey et al. (Shotey) (US 20020004740), and further in view of Burgess (US 6,720,876).**

**As per Claim 22:**

Geiger et al. does not explicitly disclose the time data represents a duration of proximity to the product.

However, Burgess discloses

the time data represents a duration of proximity to the product (see col 9, lines 29-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the time data represents a duration of proximity to the product to the system of Geiger et al.. One would have been motivated to do this in order to determine customer interest in the product via duration.

**As per Claim 23:**

Geiger et al. does not explicitly disclose the time data represents a time of proximity to the product.



However, Burgess discloses  
the time data represents a time of proximity to the product (see col 9, lines 29-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the time data represents a time of proximity to the product to the system of Geiger et al.. One would have been motivated to do this in order to gather customer data on shopping.

**As per Claim 50:**

Geiger et al. does not explicitly disclose the time data represents durations of presence at the plurality of locations.

However, Burgess discloses  
the time data represents durations of presence at the plurality of locations (see col 9, lines 29-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the time data represents durations of presence at the plurality of locations to the system of Geiger et al.. One would have been motivated to do this in order to determine customer interest in the product via duration.

**As per Claim 51:**

Geiger et al. does not explicitly the first time data represents a time of presence at the plurality of locations.

However, Burgess discloses

the first time data represents a time of presence at the plurality of locations (see col 9, lines 29-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the first time data represents a time of presence at the plurality of locations to the system of Geiger et al.. One would have been motivated to do this in order to determine customer interest in the product via duration.

**6. Claims 24, 52, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger et al. (Geiger) (US 2001/0028301), in view Swartz et al. (Swartz) (US 20030132298), in view of Shotey et al. (Shotey) (US 20020004740), and further in view of Hampton et al. (US 6,252,522).**

**As per Claim 24:**

Geiger et al. does not explicitly disclose gathering media data exposure data in the portable monitor representing exposure of the respective participant to media data and storing the media data exposure data in association with second time data on the predetermined time base representing timing of exposure to the media data.

However, Hampton et al. discloses

gathering media data exposure data in the portable monitor representing exposure of the respective participant to media data and storing the media data

exposure data in association with second time data on the predetermined time base representing timing of exposure to the media data (see col 6, lines 9-16).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add gathering media data exposure data in the portable monitor representing exposure of the respective participant to media data and storing the media data exposure data in association with second time data on the predetermined time base representing timing of exposure to the media data to the system of Geiger et al.. One would have been motivated to do this in order gather customer related data.

**As per Claim 52:**

Geiger et al. does not explicitly disclose gathering media data exposure data in the portable monitor representing exposure of the participant to media data in association with second time data on the predetermined time base representing timing of exposure to the media data.

However, Hampton et al. discloses

gathering media data exposure data in the portable monitor representing exposure of the participant to media data in association with second time data on the predetermined time base representing timing of exposure to the media data (see Abstract).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add gathering media data exposure data in the

portable monitor representing exposure of the participant to media data in association with second time data on the predetermined time base representing timing of exposure to the media data to the system of Geiger et al.. One would have been motivated to do this in order gather customer related data.

**As per Claim 54:**

Geiger et al. does not explicitly disclose gathering data in the portable monitor representing exposure of the participant to media data.

However, Hampton et al. discloses

gathering data in the portable monitor representing exposure of the participant to media data (see Abstract and col 6, lines 9-16).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add gathering data in the portable monitor representing exposure of the participant to media data to the system of Geiger et al.. One would have been motivated to do this in order gather customer related data.

**7. Claims 26, 27, 46, and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger et al. (Geiger) (US 2001/0028301), in view Swartz et al. (Swartz) (US 20030132298), in view of Shotey et al. (Shotey) (US 20020004740), and further in view of Maggio (US 5,489,096).**

**As per Claim 26:**

Geiger et al. does not explicitly disclose gathering data in the portable monitor representing exposure of the respective participant to media data.

However, Maggio discloses

gathering data in the portable monitor representing exposure of the respective participant to media data (see paragraph [0013]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add gathering data in the portable monitor representing exposure of the respective participant to media data to the system of Geiger et al.. One would have been motivated to do this in order to gather customer response to advertising.

**As per Claim 27:**

Geiger et al. does not explicitly disclose gathering data in the portable monitor representing exposure of the respective participant to outdoor advertising.

However, Maggio discloses

gathering data in the portable monitor representing exposure of the respective participant to outdoor advertising (see paragraph [0013]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add gathering data in the portable monitor representing exposure of the respective participant to outdoor advertising to the system of Geiger et al.. One would have been motivated to do this in order to gather customer response to outdoor data such as billboards.

**As per Claim 46:**

Geiger et al. does not explicitly disclose an outdoor advertising exposure monitoring device operative to gather outdoor advertising data in the portable monitor representing exposure of the respective participant to outdoor advertising, the outdoor advertising exposure monitoring device being coupled with the data storage to supply the outdoor advertising data thereto, the data storage being operative to store the outdoor advertising data in association with second time data on the predetermined time base received from the clock and representing a timing of exposure to the outdoor advertising.

However, Maggio discloses

an outdoor advertising exposure monitoring device operative to gather outdoor advertising data in the portable monitor representing exposure of the respective participant to outdoor advertising, the outdoor advertising exposure monitoring device being coupled with the data storage to supply the outdoor advertising data thereto, the data storage being operative to store the outdoor advertising data in association with second time data on the predetermined time base received from the clock and representing a timing of exposure to the outdoor advertising (see paragraph [0013]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add an outdoor advertising exposure monitoring device operative to gather outdoor advertising data in the portable monitor representing exposure of the respective participant to outdoor advertising, the outdoor advertising exposure monitoring device being coupled with the data storage to supply the outdoor

advertising data thereto, the data storage being operative to store the outdoor advertising data in association with second time data on the predetermined time base received from the clock and representing a timing of exposure to the outdoor advertising to the system of Geiger et al.. One would have been motivated to do this in order to gather customer response to outdoor data such as billboards.

**As per Claim 66:**

Geiger et al. does not explicitly disclose the portable monitor comprises an outdoor advertising exposure monitor operative to gather outdoor advertising data representing exposure of the participant to outdoor advertising.

However, Maggio discloses

the portable monitor comprises an outdoor advertising exposure monitor operative to gather outdoor advertising data representing exposure of the participant to outdoor advertising (see paragraph [0013]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the portable monitor comprises an outdoor advertising exposure monitor operative to gather outdoor advertising data representing exposure of the participant to outdoor advertising to the system of Geiger et al.. One would have been motivated to do this in order to gather customer response to outdoor data such as billboards.

**8. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger et al. (Geiger) (US 2001/0028301), in view Swartz et al. (Swartz) (US**

**20030132298), in view of Shotey et al. (Shotey) (US 20020004740), and further in view of Steinbrecher (US 2003/0061002).**

**As per Claim 63:**

Geiger et al. does not explicitly disclose the portable monitor comprises a clock operative to produce first time data on a predetermined time base and coupled with the data storage to provide the first time data thereto, the data storage being operative to store the first time data in association with the participant location data representing timing of the participant's presence at the plurality of locations.

However, Steinbrecher discloses

the portable monitor comprises a clock operative to produce first time data on a predetermined time base and coupled with the data storage to provide the first time data thereto, the data storage being operative to store the first time data in association with the participant location data representing timing of the participant's presence at the plurality of locations (see paragraph [0048]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the portable monitor comprises a clock operative to produce first time data on a predetermined time base and coupled with the data storage to provide the first time data thereto, the data storage being operative to store the first time data in association with the participant location data representing timing of the participant's presence at the plurality of locations to the system of Geiger et al.. One would have been motivated to do this in order to gather customer data pertaining to proximity to product.



### **Response to Arguments**

9. The applicant's arguments are moot in light of the new grounds of rejection above.

### **Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney M. Henry whose telephone number is 571-270-5102. The examiner can normally be reached on Monday through Thursday from 7:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Namrata Boveja can be reached on 571-272-8105. The fax phone number for the organization where this application or proceeding is assigned is 571-270-6102

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RMH

/Arthur Duran/

Primary Examiner, Art Unit 3682